

ABSTRACT

A cured resin dissolving composition comprising a cellulosic gelling agent prepared in n,n-dimethylacetamide, known for its high penetration and solvency to polar resins, with a glycol-ether co-solvent, 1,8-diazabicyclo(5.4.0)undec-7-ene as a soluble amine, and a surfactant. The mixture of components form a gel-form composition while maintaining high dissolution character for cured polysulfide resins. The optimum thickness of the gel form is dependent upon the amount of the cellulose gelling agent present in the mixture. The product may be used to remove coatings and sealants present on vertical and horizontal surfaces and hard to reach areas commonly encountered when performing maintenance on aviation fuel tanks and similar equipment. Once the system has been in contact with the resin and dissolution has been allowed for a period of time, the reacted material may be wiped away or can be easily rinsed with water, an alcohol, or another hydrophilic rinse. The invention has application in a wide range of industries where removal of cured resin is desired either in performing maintenance or for selective cleaning. Examples of industry applications include removing polysulfide coatings and sealants in aerospace, automotive, and construction.